



International Heliophysical Year

Volume 2 • July 30, 2004

Editors: K. S. Balasubramaniam (NSO) & Emilie Drobnes (NASA/GSFC)

IHY Picks up the Pace!

With just about 2.5 years to lead into the IHY 2007 science efforts, we have picked up considerable momentum towards a collective opportunity to understand our heliophysical universe. A successful US Planning workshop was held at NSO/Sac Peak April 20-22 of this year. Details of this workshop are summarized by Joe Davila on page 2 of the newsletter.

An article describing the goals of the IHY, by Nancy Crooker (BU) is underway. You can download the article on the IHY website (<http://ihy.gsfc.nasa.gov/>)

For the IHY to be successful we need your participation in this. The IHY collective science effort of several nations and international organizations will help establish continuous and seamless understanding of physical processes from the sun into the heliosphere, and its impact on planetary magnetospheres and their climate.

The U.S. House of Representatives Science Committee approved House Con. Resolution 189: Celebrating the 50th anniversary of the International Geophysical Year (IGY) and supporting an International Geophysical Year-2 (IGY-2) in 2007-08 (<http://www.house.gov/science/press/108/108-183.htm>)

The IHY Science Coordination Database is nearly ready for release! Beta testing is underway. The database will have fields which allow us to coordinate participants with respect to geographical locations, institutions, scientific organizations, observatories and projects, and scientific interests (AGU Index Terms). The database will eventually expand to include campaign planning and coordination! Your comments, inputs and assistance to the construct of these pages and pointers to the appropriate resources are welcome and appreciated. Your suggestions can be mailed to bala@nso.edu.

US Organizing Committees:

The IHY 2007 U. S. National OC: L. Strachan (CfA), K. Balasubramaniam (NSO), J. Kasper (MIT), N. Fox (JHU/APL), E. Moebius (SSC, UNH), D. Webb (USAF/BU), C. Jackman (NASA/GSFC), R. Smith (GI, U. of Alaska), C. Smith (SSC, UHN), N. Crooker (BU), H. Singer (NOAA/SEC), M. Baldwin (NWRA), and F. Yu (SUNY at Albany).

New Measurements and Instrumentation/ International Development: N. Fox, J. Kasper, P. Kintner (Cornell), R. Smith, J. Bieber (UD), B. Thompson (NASA/GSFC), D. Byers (AFOSR)

Proposals and Funding: J. Davila (NASA/GSFC), members from AFOSR, NSF and NASA HQ as liaisons, N. Gopalswamy (NASA/GSFC), B. Thompson, E. Moebius, M. Hagan (HAO), M. Hudson (Dartmouth College), G. Siscoe (advisory role, BU)

CDAW/eGY/Data Access: C. Smith, D. Baker (U Colorado), P. Fox (HAO), P. Martens (MSU), E. Christian (NASA/HQ), Adam Szabo (GSFC/VHO), B. Thompson, J. Gurman (GSFC/VSO), V. Papitashvili (MI), S. Hill (SEC), R. Bentley (MSSL/GRID), N. Hurlburt (Lockheed), N. Gopalswamy, A. Davey, and J. Burkepile (HAO)

E & PO WG: E. Drobnes (NASA/GSFC), K. Beisser, P. Dusenbury, R. Johnson, D. Dooling (NSO), J. Kasper

In This Issue:

- IHY Picks up the Pace!
- US Organizing Committees
- UK Efforts
- US Planning Workshop Summary
- Upcoming Events

UK Efforts:

The UK IHY website is now available online.

<http://www.ihy.rl.ac.uk/>

Building on the UK IHY planning meeting in December 2003, a broad team of researchers have continued to build support and awareness for IHY in the United Kingdom. The website will serve as an information and coordination point for UK scientists.

International Efforts:

We are seeking volunteers to help with the coordination of our international efforts. We have identified international coordinators for quite a few countries, but there are many countries still in need of representatives!

Please contact: N. Gopalswamy gopals@fugee.gsfc.nasa.gov our international coordinator.

Contact: IHY needs you! Do you have any projects or websites which are relevant to IHY? Know of a meeting, workshop, or other activity which may provide a great opportunity for IHY planning, contact, or coordination? Then email us at ihy@ihy.gsfc.nasa.gov or visit <http://ihy.gsfc.nasa.gov/registration.shtml> to join the IHY email list and register your support.

Summary of the US Planning Workshop

J. Davila (NASA/GSFC).

On April 20-22 a workshop to begin to plan activities for the 2007 International Heliophysical Year (IHY) was held at the National Solar Observatory, Sunspot, NM. The workshop was attended by approximately 60 scientists representing the disciplines of climate, upper atmospheric, magnetospheric, heliospheric, and solar physics.

Scientific organizers for the meeting were D. Baker (Co-Chair, U. Colorado), N. Crooker (Co-Chair, Boston U.), K. Balasubramaniam (NSO), J. Davila (GSFC), T. Fuller-Rowell (SEC), N. Gopalswamy (GSFC), M. Hudson (Dartmouth), C. Jackman (GSFC), E. Moebius (UNH), A. Pevtsov (NSO), C. Russell (UCLA), C. Smith (UNH), S. Sofia (Yale), B. Thompson (GSFC), D. Webb (AFRL), D. Baker (Co-Chair, U. Colorado). The workshop was sponsored by the National Solar Observatory, and the NASA Sun Earth Connection Living with a Star Program.

The IHY is a follow-on to the highly successful International Geophysical Year in 1957, which was itself a follow-on to the International Polar Years of 1872, and 1932. The overall objectives of the IHY (<http://ihy.gsfc.nasa.gov>) are:

1. To provide benchmark measurements of the response of the magnetosphere, the ionosphere, the lower atmosphere and Earth surface to identify global processes and drivers which affect the terrestrial climate and space environment.
2. To coordinate the global study of the Sun-heliosphere system outward to the heliopause to understand the external, and historic drivers of geophysical change.
3. To foster international scientific cooperation in the study of Heliophysical phenomena now and in the future.
4. To communicate the unique scientific results of the IHY to the interested scientific community and to the general public.

The purpose of the Planning Workshop was to begin to define the US role in this international event. Keynote talks during the plenary session held the first day emphasized the legacy of previous International Years, emphasizing the need for studies of basic science which focus on global processes and cross traditional discipline boundaries. After a plenary session on the first day, participants were divided into 5 working groups to develop specific scientific questions which could be addressed during the IHY. These groups were, Climate and Earth Atmosphere (WG Leaders: Mark Baldwin and Rolando Garcia) Magnetospheres and Ionospheres (WG Leaders: Howard Singer and Jan Soika) Heliosphere and Solar Wind (WG Leaders: Justin Jasper and Eberhard Moebius) Solar Drivers (WG Leaders: Terry Forbes and Sarah Gibson).

A similar meeting has already taken place in the UK, and others are expected during the next year in Europe, India, China, Japan, and Australia. Representatives from these regional meetings will be invited to an International Planning Session at Toulouse, France in July of 2005. Summaries of the reports from these working groups are available on the Workshop website (<http://ihy.nasa.gsfc.gov/ihyplan2004.shtml>).

Many phenomena which have at their root a single physical process, i.e. reconnection, or shock acceleration, which can be studied in many different environments throughout the solar system. Through comparative studies in these varied environments, significant basic scientific knowledge can be gained.

Upcoming Events:

AGU: 13-17 December

AGU Special session SH14

Low-cost, ground-based instrument arrays for world-wide studies in space science.

Contact: J. Kasper
(jck@mit.edu)

AGU Special session SM05

Plasma Physics of the Local Cosmos

Contact: J. Davila:
(joseph.davila@gsfc.nasa.gov)

AGU Special session ED01

Space Observations for Earth System Science Education Opportunities in the IPY and IHY .

Contact: B. Thompson
Barbara.J.Thompson@nasa.gov

Newsletter Submissions:

We are always looking for contributions to the IHY newsletter!

If you have an article, announcement, meeting summary, or anything of importance or pertaining to the IHY, effort, please submit it to Emilie Drobnes:

emilie@ihy.gsfc.nasa.gov